

East Building, PHH-30 1200 New Jersey Avenue S.E. Washington, D.C. 20590

Pipeline and Hazardous Materials Safety Administration

DOT-SP 11892 (EIGHTH REVISION)

EXPIRATION DATE: 2018-12-31

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: Van Hool N.V.

Lier Koningshooikt, Belgium

US AGENT: ETCetera International, Inc.

McKinney, TX

2. PURPOSE AND LIMITATIONS:

- a. This special permit authorizes the manufacture, mark, sale and use of certain DOT Specification 51 steel portable tanks manufactured in accordance with Section VIII, Division 2 of the ASME Code instead of Division 1. The portable tanks, mounted in ISO frames, are authorized for the transportation in commerce of Division 2.1 and 2.2 materials. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
- b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce.
- 3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171- 180.
- 4. REGULATIONS FROM WHICH EXEMPTED: The 2006 version of 49 CFR § 178.245-1(a) in that tanks are designed, constructed, certified and stamped in accordance with Section VIII, Division 2 of the ASME Code.

- 5. <u>BASIS</u>: This special permit is based on the application of Van Hool N.V., dated January 14, 2015, submitted in accordance with § 107.109 and additional information dated June 27, 2016.
- 6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Materials Description					
Proper Shipping Name	Hazard Class/ Division	Identi- fication Number	Packing Group		
Division 2.1 and 2.2 materials authorized for DOT Specification 51 portable tanks.	2.1 2.2	Various	N/A		

7. SAFETY CONTROL MEASURES:

- a. PACKAGING Packagings authorized are three designs of DOT Specification 51 steel portable tanks that are designed, constructed, certified and stamped in accordance with Section VIII, Division 2 of the ASME Code, including the ASME Code "U2" stamp. Each portable tank must be constructed in accordance with Van Hool drawings TD 1865 Sheets 1, 2, 3, and 4; and TD 1866, and with specifications and calculations on file with the Office of Hazardous Materials Special Permits and Approvals (OHMSPA) and in compliance with the following provisions:
 - (1) Code All tanks must comply with DOT Specification 51 in all respects except the design code. This special permit authorizes the use of Section VIII, Division 2, of the ASME Code as the design code.

NOTE: Pending the resolution of ASME Code Case BC97-379, the "U2" stamp need not be applied to the ASME name plate on each tank provided the following documentation is submitted to OHMSPA: (1) a statement from the ASME Inspector attesting the tank complies with Division 2 of Section VIII of the ASME Code except for the stamping and (2) a completed ASME A-1 form for each tank.

(2) Material - SA612-N carbon steel

(3) Tank Dimensions and Design Criteria -

Tank Design	Water Capacity Gallons	Outside Diameter Inches	Length Inches	Min Shell Thickness Inches	Min Head Thickness Inches
VH17/23.1	4500	81.1	225.79	0.540	0.662
VH17/25.2	4500	81.1	225.79	0.588	0.713
VH17/31.6	4500	81.1	225.79	0.736	0.866

(4) Pressure and Venting Data -

Tank Design	Design Pressure	Test Pressure	Surface Area	PRV Setting	Total Relief Capacity
	(Note 1) psig	psig	Sq Ft	psi	(Note 2) SCFH
VH17/23.1	335	503	420	368	1,463,640
VH17/25.2	365	550	420	400	1,539,660
VH17/31.6	458	687	420	504	1,987,080

Notes:

- 1. Design pressure means "Maximum Allowable Working Pressure" as used in the ASME Code.
- 2. The venting capacity requirement for each material must be determined by the flow formulas contained in the Compressed Gas Association (CGA) Pamphlet S-1.2. For each tank design, two 3-inch diameter spring loaded safety relief valves, outboard and in series with a single rupture disc set at 110% of the design pressure must be provided.

(5) Design Weights -

Tank Design	Design Specific Gravity	Maximum Gross Weight	Tare Weight	Maximum Net Weight	Design Temperature Range
VH17/23.1	1.60	74,956#	14,950#	60,006#	-40°C to 50°C
VH17/25.2	1.58	74,956#	15,750#	59,206#	-40°C to 50°C
VH17/31.6	1.52	74,956#	18,140#	56,816#	-40°C to 50°C

- (6) Weld Joint Efficiency 1.0 Weld joints must be 100% tested by non-destructive method as authorized by ASME Code.
- (7) Corrosion Allowance 0.0
- (8) G-Loadings: Vertical down 2; Vertical up 2 Longitudinal - 2; Transverse - 2
- (9) Openings The following are provided on each tank:
- One (1) 20" for the manway on front head
- Two (2) 2" for the liquid and vapor lines on front head
- One (1) 3" for the pressure relief system on top
- One (1) 3/4" for the thermowell on front head
- One (1) 1/4" for the pressure gauge on front head

<u>MOTE</u>: Each bottom outlet valve must be provided with a shear section that meets the requirements of 49 CFR 178.337-12.

- (10) Insulation Tanks may be provided with a sunshield (optional).
- (11) Baffles Optional.

b. TESTING -

(1) Hydrostatic test certificates for each tank must be maintained by the owner and made available upon request to any representative of the DOT.

(2) Each portable tank must be retested and inspected as specified for DOT Specification 51 portable tanks in \$ 173.32(e).

c. OPERATIONAL CONTROLS -

- (1) The pressure produced by the lading and any gas padding at 50° C may not exceed the design pressure of the portable tank.
- (2) The tank must be filled by weight in accordance with the provisions of \S 173.315.
- (3) Each tank must be visually inspected prior to shipment. Any unsafe condition must be corrected prior to the tank's use.

8. SPECIAL PROVISIONS:

- a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this special permit for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this special permit.
- b. A person who is not a holder of this special permit, but receives a package covered by this special permit, may reoffer it for transportation provided no modification or change is made to the package and it is offered for transportation in conformance with this special permit and the HMR.
- c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.
- d. Each packaging manufactured under the authority of this special permit must be either (1) marked with the <u>name of the manufacturer and location (city and state) of the facility at which it is manufactured</u> or (2) marked with a <u>registration symbol</u> designated by the Office of Hazardous Materials Special Permits and Approvals <u>for a specific</u> manufacturing facility.

e. A current copy of this special permit must be maintained at each facility where the package is manufactured under this special permit. It must be made available to a DOT representative upon request.

f. MARKING -

- (1) Each portable tank must be plainly marked on both sides near the middle, in letters and numerals at least two inches high on a contrasting background, "DOT-SP 11892."
- (2) Each pressure relief valve must be marked with its set pressure and flow rate in SCFH.
- g. A test report documenting a satisfactory ISO prototype test for each tank design must be on file with OHMSPA prior to the first shipment.
- h. Transportation of Division 2.1 materials (flammable gases) are not authorized aboard cargo vessel unless specifically authorized in the Hazardous Materials Table (§ 172.101).
- 9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, and cargo vessel.
- 10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel or motor vehicle used to transport packages covered by this special permit.
- 11. <u>COMPLIANCE</u>: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 <u>et seq</u>:
 - o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
 - o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
 - o Registration required by § 107.601 $\underline{\text{et seq.}}$, when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when this special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)- 'The Hazardous Materials Safety and Security Reauthorization Act of 2005' (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:

for Dr. Magdy El-Sibaie

Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, East Building PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/sp app/special permits/spec perm index.htm
Photo reproductions and legible reductions of this special permit

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are permitted. Any alteration of this special permit is prohibited.

PO: Andrew Eckenrode